

REMARKS

This preliminary amendment is directed to the above-referenced application.

Claims 1-22 are pending. Claims 1, 7, 8, 14, 15 and 19 are independent. Claims 15, 17, 19 and 21 are amended herein.

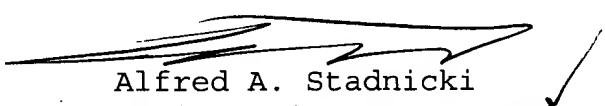
Claims 15 and 19 are amended to recite that the p-window layer is doped with Zn, as previously recited in claims 17 and 21. Claims 17 and 21 are amended in view of the amendments to their parent claims. No new matter is being introduced. Entry and examination on the merits is respectfully requested.

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance and an early indication of the same is courteously solicited. The Examiner is respectfully requested to contact the undersigned by telephone at the below listed local telephone number, in order to expedite resolution of any remaining issues and further to expedite passage of the application to issue, if any further comments, questions or suggestions arise in connection with the application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 01-2135 and please credit any excess fees to such deposit account.

Respectfully Submitted,

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APPENDIX
(DELETIONS IN BRACKETS AND ADDITIONS UNDERLINED)

15. A LED of AlGaInP system, comprising:
a substrate having n-type conductivity,
a n-type cladding layer formed of compound semiconductor of AlGaInP system,
an active layer formed of compound semiconductor of AlGaInP system having a smaller band gap energy than that of said n-type cladding layer,
a p-type cladding layer formed of compound semiconductor of AlGaInP system having a larger band gap energy than that of said active layer.
a p-type window layer doped with Zn,
an insertion layer formed of compound semiconductor of AlGaInP system which is inserted into said p-type cladding layer or between said p-type cladding layer and said p-type window layer,
wherein said insertion layer is lattice-matched with said p-type cladding layer, and a composition ratio of Al in said insertion layer is lower than that in said p-type cladding layer and higher than that in said active layer.

17. A LED of AlGaInP system according to claim 15,
wherein:
said p-type cladding layer [and said p-type window layer are]is doped with Zn.

19. An epitaxial wafer for a LED of AlGaInP system,
comprising:
a substrate having n-type conductivity,
a n-type cladding layer formed of compound semiconductor of AlGaInP system,

an active layer formed of compound semiconductor of AlGaInP system having a smaller band gap energy than that of said n-type cladding layer,

a p-type cladding layer formed of compound semiconductor of AlGaInP system having a larger band gap energy than that of said active layer,

a p-type window layer doped with Zn, and

an insertion layer formed of compound semiconductor of AlGaInP system which is inserted into said p-type cladding layer or between said p-type cladding layer and said p-type window layer,

wherein said insertion layer is lattice-matched with said p-type cladding layer, and a composition ratio of Al in said insertion layer is lower than that in said p-type cladding layer and higher than that in said active layer.

21. An epitaxial wafer for a LED of AlGaInP system according to claim 19, wherein:

said p-type cladding layer [and said p-type window layer are]is doped with Zn.